

In The Claims:

Claims 9, 12, 15, and 20 have been amended as follows:

Sub B37
A³
9. (Once Amended) A field emission device comprising:
a substrate;
a cathode conductive layer disposed over said substrate; and
an emitter tip integral with an emitter layer disposed over said cathode conductive layer and having a base adjacent to the emitter layer, an apex, and a continuously concave exterior surface extending from the base to the apex.

Sub B17
A⁴
12. (Once Amended) A field emission device comprising:
a substrate;
a cathode conductive layer disposed over said substrate; and
an emitter tip projecting from and integral with an emitter layer disposed over said cathode conductive layer and having a base adjacent to the emitter layer, an apex, and an exterior surface, said exterior surface having a substantially paraboloid vertical profile that extends from the base to the apex.

15. (Once Amended) A field emission device comprising:
a substrate;
a cathode conductive layer disposed over said substrate; and
an emitter tip that is an integral portion of a single emitter layer disposed over said cathode conductive layer and having a base adjacent to the emitter layer, an apex, and an exterior surface, said exterior surface having an ovoid profile that extends from the base to the apex.

20. (Once Amended) A flat panel display device comprising:
a substrate;
a cathode conductive layer disposed over said substrate;
an array of emitter tips formed as a part of an emitter layer disposed over said substrate, each of said emitter tips having a height and including a base adjacent to the emitter layer and an apex, each of said emitter tips having an exterior surface, said exterior surface having a profile with a continuous shape that extends from the base to the apex, said continuous shape being selected from the group consisting of a concave shape, a substantially paraboloid shape, and an ovoid shape;
a conductive gate structure disposed over said cathode conductive layer;
an array of apertures formed through said conductive gate structure, each of said emitter tips being exposed through one of said apertures; and
an anode panel for emitting light in response to electrons emitted from said array of emitter tips.